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TITLE: Paper laminate and method for producing the laminate and paperboard containers

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Paperboard cartons are widely used for packaging liquid food products, such as milk and fruit juices. It is typical to use resin coatings, films, and foils in one or more layers to provide a barrier between the contents of the container and the paperboard. The containers also are usually provided with exterior resin coatings that provide a water barrier, printable surface and improved container appearance. The exterior resin coatings are used in the formation of overlapping seals required during carton manufacture, set-up and sealing.

The manufacture of such containers involves coating both sides of the paperboard stock in a continuous web, as well as printing, scoring and cutting to the shape and dimensions required in individual flat blanks. The outer surface of a flap and a complementary inner surface on each flat blank are typically heated by a direct flame seam sealer while the heated carton blank surfaces are essentially unsupported--not compressed between two heating jaws, as would be the case in other forms of non-flame heat sealer applications. The complementary overlapping areas of each blank are then brought in contact with pressure to form a flattened tube blank having a lap seal that serves as a liquid-tight side seam in the final carton. The flattened

tube blanks are
shipped to end users, such as dairies or juice
manufacturers, who erect the
blanks, complete them by further non-flame heat sealing,
fill them and finally
complete the sealing operations.